

Claims:

1. A method of transfer of a call connection connecting a telecommunications base station and a mobile user terminal between dedicated channels in both directions therebetween and shared channels in both directions therebetween, comprising:
 - 5 determining the amount of data buffered at the base station and the user terminal for transmission therebetween and/or the rate that data arrives at the base station and user terminal for transmission therebetween;
 - 10 determining a value of a measured parameter of the signals between the base station and the user terminal, the parameter being signal attenuation or propagation delay; and
 - deciding, dependent upon said value and upon said amount or rate, to make the transfer.
- 15 2. A method of transfer of a call connection according to claim 1, in which for a shared channel call connection, upon the parameter value being determined as being less than a predetermined threshold, transfer is made to dedicated channels.
- 20 3. A method of transfer of a call connection according to claim 1 or claim 2, in which for a dedicated channel call connection, upon the parameter value being determined as being more than a predetermined threshold, transfer is made to shared channels.
- 25 4. A method of transfer of a call connection according to claim 1, in which the transfer is made also dependent upon whether or not the shared channels operate such that an acknowledgement of receipt is sent on receiving data.
- 30 5. A method of transfer of a call connection according to claim 1, in which the shared channels are a Random Access Channel (RACH) and a Forward Access Channel (FACH), the base station comprises a radio network controller, and the base station and user terminal operate to transfer the call connection in accordance with the Universal Mobile Telecommunication System (UMTS) standard.

6. A telecommunications system comprising a base station and a mobile user terminal, the base station and the user terminal being in use in call connection over dedicated channels or shared channels,

5 the base station comprising decision means, a channel allocator, and a processor,

 the decision means being operative to control transfer of the call connection by the channel allocator between the dedicated channels and the shared channels dependent upon the amount of data buffered at the base station and the user terminal for transmission therebetween and/or the rate that data arrives at the 10 base station and user terminal for transmission therebetween, and also dependent upon the value of a measured parameter of the signals between the base station and the user terminal, the parameter being signal attenuation or propagation delay, the parameter value being determined by the processor.

7. A telecommunications system according to claim 6, in which in use, 15 for a shared channel call connection, upon the parameter value being determined as being less than a predetermined threshold, transfer is made to dedicated channels.

8. A telecommunications system according to claim 6, in which in use, for a dedicated channel call connection, upon the parameter value being determined as being more than a predetermined threshold, transfer is made to shared channels.

20 9. A telecommunications system according to claim 6, in which the decision means is operative to control the transfer also dependent upon whether or not the shared channels operate such that an acknowledgement of receipt is sent on receiving data.

25 10. A telecommunications system according to claim 6, in which the shared channels are a Random Access Channel (RACH) and a Forward Access Channel (FACH), the base station comprises a radio network controller and Node B, and the base station and user terminal operate to transfer the call connection in accordance with the Universal Mobile Telecommunication System (UMTS) standard.